

Patent claims

1. A process for producing press-hardened components, in particular a bodywork component, from a semi-finished product (2) made from unhardened, hot-formable steel sheet, characterized in that the following process steps are carried out
  - a component blank (10) is formed from the semi-finished product (2) by a cold-forming process, in particular a drawing process;
  - the component blank (10) is trimmed at the margin side to a margin contour (12') which approximately corresponds to the component (1) to be produced;
  - the trimmed component blank (17) is heated and press-hardened in a hot-forming tool (23);
  - the press-hardened component blank (18) is covered with a corrosion-prevention layer (34) in a coating step.
2. A process for producing press-hardened components, in particular a bodywork component, from a semi-finished product (2) made from unhardened, hot-formable steel sheet, characterized in that the following process steps are carried out
  - the semi-finished product (2) is heated and press-hardened in a hot-forming tool (23);
  - the press-hardened component blank (10') produced in this way is trimmed at the margin side to a margin contour (12') which corresponds to the component (1) to be produced;
  - the press-hardened, trimmed component blank (18') is covered with a corrosion-prevention layer (34) in a coating step.
3. The process as claimed in claim 1 or 2, characterized in that the layer (34) is applied to the press-hardened component blank (18, 18') by a hot-dip galvanization process.
4. The process as claimed in claim 1 or 2, characterized in that the layer (34) is applied to the press-hardened component blank (18, 18') by a thermal diffusion process.

5. The process as claimed in at least one of the preceding claims, characterized in that the press-hardened component blank (18, 18') is cleaned by dry cleaning prior to the coating step.
6. The process as claimed in claim 5, characterized in that the press-hardened component blank (18, 18') is blasted with particles, in particular glass particles, prior to the coating step.
7. The process as claimed in at least one of the preceding claims, characterized in that the coated component blank (18, 18') has residues of the coating step removed from it following the coating step.
8. The process as claimed in at least one of the preceding claims, characterized in that the coated component blank (18, 18') is conditioned following the coating step.
9. A press-hardened component, in particular a bodywork component, formed from a semi-finished product (2) made from unhardened, hot-formable steel sheet, characterized in that it has been produced by the process as claimed in at least one of the preceding claims.